

CLAIMS

- 1 1. A structural panel comprising,
2 a sheet of material,
3 a plurality of elongated ribs formed in said sheet of material, and
4 a sealing cap which is adapted to engage a pair of adjacent elongated
5 ribs.
- 1 2. The structural panel recited in claim 1 wherein,
2 said elongated ribs include a plurality of upright ribs which extend
3 upwardly from the surface of said sheet, and
4 a plurality of partial upright ribs which extend upwardly from the surface of
5 said sheet.
- 1 3. The structural panel recited in claim 2 wherein,
2 at least two of said upright ribs are disposed adjacent to each other.
- 1 4. The structural panel recited in claim 2 wherein,
2 at least one of said upright ribs and at least one of said partial upright ribs
3 are disposed adjacent to each other and adjacent to an edge of said sheet.
- 1 5. The structural panel recited in claim 2 wherein,
2 each of said upright ribs includes a first surface which is normal to the
3 surface of said sheet, and
4 a second surface which is disposed at an angle to said first surface
5 thereof.

1 6. The structural panel recited in claim 5 wherein,
2 a pair of said upright ribs is formed on said sheet with the first surfaces
3 adjacent to each other to form a trough therebetween.

1 7. The structural panel recited in claim 5 wherein,
2 each of said partial upright ribs includes a first surface which is normal to
3 the surface of said sheet.

1 8. The structural panel recited in claim 7 wherein,
2 a partial upright rib and an upright rib are formed in said sheet with the first
3 surfaces adjacent to each other to form a trough therebetween.

1 9. The structural panel recited in claim 1 wherein,
2 said sealing cap is a generally inverted U-shaped member which
3 selectively engages a pair of elongated ribs.

1 10. The structural panel recited in claim 1 wherein,
2 said elongated ribs are integrally formed in said sheet of material.

1 11. The structural panel recited in claim 1 wherein,
2 said sheet of material is substantially waterproof.

1 12. The structural panel recited in claim 5 wherein,
2 each of said upright ribs includes at least one groove existing along said
3 second surface substantially parallel to the surface of said sheet.

1 13. The structural panel recited in claim 12 wherein,
2 said sealing cap includes a lip at each edge thereof to engage the groove
3 in said upright ribs.

1 14. The structural panel recited in claim 4 wherein,
2 the upright rib and the partial upright rib disposed adjacent to each other
3 and adjacent to an edge of said sheet are adapted to overlie and engage the upright rib
4 and the partial upright rib disposed adjacent to each other and adjacent to an edge of a
5 second substantially identical structural panel.

1 15. The structural panel recited in claim 5 wherein,
2 the angle between said second surface and said first surface is
3 approximately 15°.

1 16. The structural panel recited in claim 1 wherein,
2 a plurality of low profile ridges formed in said sheet of material to provide
3 longitudinal strength for the panel.

1 17. The structural panel recited in claim 9 wherein,
2 each of said pair of elongated ribs comprises upright ribs which form a
3 trough therebetween which trough is covered by said sealing cap.

1 18. The structural panel recited in claim 17 wherein,
2 said trough is adapted to selectively receive fasteners for fastening said
3 structural panel to an underlying surface.